

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Please cancel claims 1-62

63. (New) A blur correction camera system comprising:

a vibration detection unit that detects a vibration and outputs a vibration detection signal;

a blur correction optical system that is driven based upon the vibration detection signal and corrects an image blur;

an image-capturing unit that captures an image formed with a photographic optical system that includes the blur correction optical system; and

an image restoration computing unit that corrects an image blur by executing image restoration through image processing on an image captured by the image-capturing unit.

64. (New) A blur correction camera system according to claim 63, further comprising:

a point spread function computing unit that computes a point spread function, wherein:

the image restoration computing unit executes the image restoration by processing the image using the point spread function.

65. (New) A blur correction camera system according to claim 64, further comprising:

a reference value computing unit that computes a reference value for the vibration detection signal, wherein:

the point spread function computing unit computes the point spread function based upon calculation results of the reference value computing unit.

66. (New) A blur correction camera system according to claim 65, comprising:

a camera that comprises the vibration detection unit, the blur correction optical system, the image-capturing unit, the point spread function computing unit, the reference value computing unit and an image recording unit that records an image; and

an external device comprising the image restoration computing unit, that is a device independent of the camera and executes the image restoration by using the image recorded by the image recording unit and the point spread function input thereto.

67. (New) A blur correction camera comprising:

a vibration detection unit that detects a vibration and outputs a vibration detection signal;

a reference value computing unit that computes a reference value for the vibration detection signal;

a blur correction optical system that is driven based upon the reference value and the vibration detection signal and corrects an image blur;

an image-capturing unit that captures an image formed by a photographic optical system that includes the blur correction optical system;

a point spread function computing unit that computes a point spread function needed in an image restoration computation based upon the reference value; and

an information volume reducing unit that reduces a volume of information related to at least one of the reference value used in the computation of the point spread function and the computed point spread function.

68. (New) A blur correction camera according to claim 67, wherein:

the information volume reducing unit reduces the information volume by culling data related to at least one of the reference value and the computed point spread function.

69. (New) A blur correction camera according to claim 67, wherein:

the information volume reducing unit reduces the information volume by ensuring that there will still be a large enough volume of information required for the image restoration computation.

70. (New) A blur correction camera system comprising:

a vibration detection unit that detects a vibration and outputs a vibration detection signal;

an image-capturing unit that captures an image formed by a photographic optical system that includes a blur correction optical system as a raw image;

an raw image saving unit that saves the raw image;

an image restoration computing unit that allows parameters related to image processing to be varied, executes image restoration through image processing on the raw image by using the parameter and creates a restored image obtained by correcting an image blur; and

a restoration result saving unit that saves at least one of the parameters used in the image processing executed at the image restoration computing unit and the restored image in correspondence to the raw image.

71. (New) A blur correction camera system according to claim 70, further comprising:

a point spread function computing unit that computes a point spread function,

wherein:

the image restoration computing unit executes the image restoration by processing the image using the point spread function; and

the parameters include the point spread function.

72. (New) A blur correction camera system according to claim 70, wherein:

the restoration result saving unit is capable of saving at least one of a plurality of sets of parameters each corresponding to one of a plurality of restored images and the plurality of restored images.

73. (New) A blur correction camera system according to claim 71, comprising:

a camera that comprises the vibration detection unit;

the blur correction optical system that is driven based upon the vibration detection signal and corrects an image blur, the image-capturing unit, the point spread function computing unit, a reference value computing unit that computes a reference value for the vibration detection signal and the raw image saving unit; and

an external device comprising the image restoration computing unit and the restoration result saving unit, that is a device independent of the camera and executes image

restoration by using the raw image recorded at the raw image saving unit and the point spread function input thereto.

74. (New) An image restoring device comprising:

a data input unit that receives raw image data and a point spread function obtained when capturing the raw image data through at least one of communication with an external device and a medium;

an image restoration computing unit that allows a parameter related to image processing to be varied, executes image restoration through executing image processing on the raw image data using parameters that include the point spread function and creates a restored image obtained by correcting an image blur; and

a restoration result saving unit that saves at least one of the parameters used in the image processing executed by the image restoration computing unit and the restored image in correspondence to the raw image.

75. (New) A computer readable computer program product containing a blur correction control program, the control program comprising the instructions of:

receiving raw image data and a point spread function obtained when capturing the raw image data;

creating a restored image by executing image restoration so as to correct an image blur through image processing executed on the raw image data using variable parameters related to the image processing that include the point spread function; and

saving at least one of the parameters used in the image processing during the image restoration computation and the restored image in correspondence to the raw image data.

76. (New) A computer program product according to claim 75, wherein:
the computer program product is a recording medium on which the control program is recorded.

77. (New) A computer program product according to claim 75, wherein:
the computer program product is a carrier wave on which the control program is embodied as a data signal.

78. (New) A blur correction camera comprising:
a vibration detection unit that detects a vibration and outputs a vibration detection signal;
an optical blur correction device that corrects an image blur by driving a blur correction optical system based upon the vibration detection signal;
a point spread function computing unit that computes a point spread function needed in image restoration in which the image blur is corrected through image processing; and
an image restoration decision-making unit that makes a decision as to whether to enter an image restoration mode in which blur correction is executed through the image restoration or a preparatory operation for blur correction to be achieved through the image restoration is executed.

79. (New) A blur correction camera according to claim 78, wherein:
the image restoration decision-making unit makes a decision as to whether to enter the image restoration mode based upon the vibration detection signal.

80. (New) A blur correction camera according to claim 78, wherein:

the image restoration decision-making unit makes a decision as to whether to enter the image restoration mode based upon a shutter speed.

81. (New) A blur correction camera according to claim 78, wherein:

the image restoration decision-making unit makes a decision as to whether to enter the image restoration mode based upon a focal length of a photographic optical system.

82. (New) A blur correction camera according to claim 78, wherein:

the image restoration decision-making unit makes a decision as to whether to enter the image restoration mode based upon the point spread function.

83. (New) A blur correction camera according to claim 78, further comprising:

a reporting device that reports a decision made by the image restoration decision-making unit that the image restoration mode should not be entered.

84. (New) A blur correction camera according to claims 78, wherein:

if the image restoration decision-making unit determines that the image restoration mode should not be entered, the image restoration mode is not entered.

85. (New) A blur correction camera according to claim 78, wherein:

if the image restoration decision-making unit determines that the image restoration mode should not be entered, the point spread function is not saved.